

REMARKS

This is a full and timely response to the outstanding Office Action mailed October 18, 2005. Upon entry of this response, claims 1-18 remain pending in the present application.

In the Office Action, pending claims 1-18 have been preliminarily rejected for obviousness under 35 U.S.C. § 103(a). Claims 1-18 have been preliminarily rejected as being unpatentable over U.S. Patent No. 5,987,415 to Breese in view of U.S. Patent No. 6,230,111 to Mizokawa. The Applicant traverses all of the rejections of the Office Action. Reconsideration and allowance of the subject application and presently pending claims 1-18 is respectfully requested.

I. Response To Claim Rejections Based On Obviousness

It is well established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of references, the cited combination of references must teach, disclose, or suggest, either implicitly or explicitly, all elements/features/steps of the claim at issue. See, e.g., In re Dow Chemical, 5 U.S.P.Q. 2d 1529, 1531 (Fed. Cir. 1988), and In re Keller, 208 U.S.P.Q. 871, 881 (C.C.P.A. 1981).

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP 2143.03. Therefore, if the Examiner intends to maintain the obviousness rejections, based upon a combination of prior art references, the Applicant respectfully requests that the Examiner identify the

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specific teachings within the prior art that teach or suggest all of the claim limitations, specifically "sensing at least one psychomotor behavioral element."

A. Claim 1

Independent claim 1 reads:

A method of obtaining information regarding an environment for an individual, having preferred modalities and engaged in activity, using a programmable device, said method comprising the steps of:

sensing at least one psychomotor behavioral element of the activity engaged by the individual; and
determining the preferred modalities of the individual based on the psychomotor behavioral element of the activity engaged by the individual.
(Emphasis Added)

The Applicant respectfully submits that Breese in view of Mizokawa, fails to teach, disclose, or suggest at least the above-emphasized element of claim 1.

Specifically, Breese in view of Mizokawa fails to at least teach, disclose, or suggest determining the preferred modalities of the individual. Page 4 of the Office Action states that Breese fails to at least teach, disclose, or suggest determining the preferred modalities of the individual. Therefore, only the suggestion that Mizokawa teaches determining the preferred modalities of the individual.

As the office action states on pages 4 and 5, "Mizokawa is directed to controlling object using pseudo-emotions and pseudo-personality generated in the object, more specifically, recognizing, updating user commands related to pseudo-personality, pseudo-emotions, and patterns of behavior." Applicant's claim of determining the preferred modalities of the individual is distinctly different from the teachings of Mizokawa as described in the office action.

As detailed in the filed application, "humans have as many modalities as they have senses. For the purposes of a simplified discussion, we use a simplified web browser interface for reference. We can match the sensory modalities to the presentation via a grid. The grid [shown in the application] represents three of the many sensory modalities most humans share; visual, auditory and kinesthetic."

Paragraph 54. The "sensory" modalities are "input" modalities and those having ordinary skill in the art recognize that sensory modalities include things like visual, auditory, kinesthetic, olfactory, gustatory, vestibular, proprioceptive, tactile and vomeronasal. There is some conjecture if the PNI is another sensory modality. Consciousness researchers are discovering we have more senses than we previously realized (vomeronasal, for example, wasn't recognized as a sense until the mid-1990s). It is sufficient to say that we have more sensory modalities than the five one might assume and it is reasonable to believe in the future we may understand we have more senses than we recognize today.

Paragraphs 66-75 further detail modalities as claimed. As described in paragraphs 66 and 67, "when grid movement is determined the modality summations can be selected to determine if the viewer's attention is focused on visual, auditory, kinesthetic or other related cues. Based on the results of this equation, the web server can prepare in real time what the next presentation and interface should be in order to capture more of the viewer's attention by presenting the web content in modalities, which the viewer has nonconsciously selected."

As described in the above passages and the cited portions of the application, the present invention is directed toward determining preferred modalities of an

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individual. The preferred modalities are both sensory and cognitive (internal?) in nature – which sensory modes does the individual prefer for receiving information and what internal modalities must be engaged for acceptance, understanding, decision making, or other actions. Some people would prefer to receive visually-oriented information over auditory-oriented information. Mizokawa does not teach identifying preferred modalities of an individual. Mizokawa teaches a recognition of emotion and a pseudo-emotional response. Emotions are not modalities.

As can readily be seen, the Applicant's claim is limited to determining the preferred modalities of the individual, rendering the claim nonobvious in view of Breese and Mizokawa. Therefore, the Applicant respectfully requests withdrawal of the preliminary rejection.

B. Claims 2-11

The Applicant respectfully submits that since claims 2-11 depend on independent claim 1, claims 2-11 contain all limitations of independent claim 1. Since independent claim 1 should be allowed, as argued above, pending dependent claims 2-11 should be allowed as a matter of law for at least this reason. In re Fine, 5 U.S.P.Q. 2d 1596, 1608 (Fed. Cir. 1988).

1. Claim 5

Claim 5 is allowable at least for the reasons stated above. Further, in marked contrast to Breese and Mizokawa, the claimed invention teaches storing sensed information in terms of preferred representational geometries via linear algebraic

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transforms. To the Applicant's reading, neither the passages cited in the Office Action, nor any other text in Breese and Mizokawa, teaches or suggests storing information in the form of linear algebraic transforms.

Page 6 of the Office Action mentions Breese "teaches Bayesian network model associate with various algebraic transforms." However, the algebraic transforms disclosed in the passage cited in Breese are not linear algebraic transforms, Breese is not teaching algebraic transforms to store data. The claimed invention is using linear algebraic transforms to store data, not analyze it. Mizokawa teaches storing sensed data, but does not suggest it would be more useful to store the sensed data as linear algebraic transforms. Nothing in the cited references suggests storing sensed information using linear algebraic transforms.

2. Claim 6

Claim 6 is allowable at least for the reasons stated above. As explained above, Mizokawa does not teach determining preferred modalities. To the extent the emotions sensed in Mizokawa or the pseudo-emotions outputted are 'modalities' as suggested in the office action, Mizokawa does not teach determining a "preferred combination of emotions" or an "ordering of emotions by preference." The passage cited in the office action mentions that Mizokawa teaches a plurality of methods for sensing emotions, but does not speak in any manner to determining a "preference".

3. Claim 7

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Claim 7 is allowable at least for the reasons stated above. As explained above, Mizokawa does not teach determining preferred modalities. To the extent the emotions sensed in Mizokawa or the pseudo-emotions outputted are 'modalities' as suggested in the office action, Mizokawa does not teach determining a "preferred combination of emotions" or an "ordering of emotions by preference." The passage cited in the office action mentions that Mizokawa teaches a plurality of methods for sensing emotions, but does not speak in any manner to determining a "preference".

4. Claim 8

Claim 8 is allowable at least for the reasons stated above. Page 4 of the Office Action states that Breese fails to at least teach, disclose, or suggest determining the preferred modalities of the individual. It is therefore counterintuitive for the office action to state that "Breese teaches defining a psychodynamic and a cognitive behavioral model using preferred combination modalities." The Applicant respectfully submits that Breese cannot teach this claim limitation if it does not teach determining preferred modalities.

5. Claim 9

Claim 9 is allowable at least for the reasons stated above. Further, claim 9 is limited to a specific formula for calculating the combination and order of modalities. Breese does teach using algorithms. Mizokawa teaches calculating pseudo-emotions. The Applicant disputes neither of these points. Neither references teaches

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using the specifically claimed formula for calculating the combination and order of modalities.

C. Claim 12

Independent claim 12 reads:

A programmable apparatus for obtaining information regarding an environment to an individual having preferred modalities, said apparatus comprising:

at least one sensor for sensing psychomotor behavioral activity of the individual; and

a processing unit connected to the sensor for receiving the sensed psychomotor behavioral activity and ***calculating the individual's preferred modalities*** based on the sensed psychomotor behavioral activity.

(Emphasis Added)

The Applicant respectfully submits that Breese in view of Mizokawa, fails to teach, disclose, or suggest at least the above-emphasized element of claim 12. For reasons identical to those given in the defense of claim 1, claim 12 is allowable. Specifically, the Applicant's claim is limited to calculating the individual's preferred modalities, rendering the claim nonobvious in view of Breese and Mizokawa. Therefore, the Applicant respectfully requests withdrawal of the present rejection.

D. Claims 13-18

The Applicant respectfully submits that since claims 13-18 depend on independent claim 12, claims 13-18 contain all limitations of independent claim 12. Since independent claim 12 should be allowed, as argued above, pending

dependent claims 13-18 should be allowed as a matter of law for at least this reason. In re Fine, 5 U.S.P.Q. 2d 1596, 1608 (Fed. Cir. 1988).

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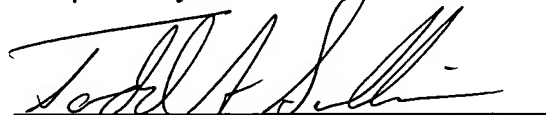
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CONCLUSION

In light of the reasons set forth above, the Applicant respectfully submits that all rejections have been traversed, rendered moot and/or accommodated, and that presently pending claims 1-18 are in condition for allowance. Favorable reconsideration and allowance of the present application and the presently pending claims are hereby courteously requested. If in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (603) 668-1400.

Respectfully submitted,



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